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| APPLICATION NO | Э. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------------------|-------------|----------------------|------------------------|------------------|
| 09/901,487 | | 07/09/2001 | Ho Kyoum Kim | 2598/OJ593 | 5179 |
| 7278 | 7590 | 08/16/2004 | | EXAMINER | |
| DARBY | | BY P.C. | BROOKE, MICHAEL S | | |
| P. O. BOX 5257 NEW YORK, NY 10150-5257 | | | | ART UNIT | PAPER NUMBER |
| 1,2,, 10, | NEW TOTAL, INT. TOTAL SEE | | | 2853 | |
| | | | | DATE MAILED: 08/16/200 | 4 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | U) | |
|--|---|--|---------------------|
| | Application No. | Applicant(s) | |
| | 09/901,487 | KIM ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | Michael S. Brooke | 2853 | : |
| The MAILING DATE of this communication ap Period for Reply | pears on the cover shee | t with the correspondence ac | ddress |
| A SHORTENED STATUTORY PERIOD FOR REPL | V IS SET TO EXPIDE | 1 MONTH(S) EDOM | |
| THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, many within the statutory minimum o will apply and will expire SIX (6) e, cause the application to become | y a reply be timely filed f thirty (30) days will be considered time MONTHS from the mailing date of this of the ABANDONED (35 U.S.C. § 133). | |
| Status | | | |
| 1) Responsive to communication(s) filed on 21 J | lune 2004. | | |
| <u> </u> | s action is non-final. | | |
| 3) Since this application is in condition for allowa | ance except for formal n | natters, prosecution as to th | e merits is |
| closed in accordance with the practice under | Ex parte Quayle, 1935 | C.D. 11, 453 O.G. 213. | |
| Disposition of Claims | | | |
| 4) ⊠ Claim(s) 1-15 and 21-25 is/are pending in the 4a) Of the above claim(s) 11-15 and 22-25 is/s 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) 1-10 and 21 are subject to restriction | are withdrawn from con | | |
| Application Papers | | | |
| 9) The specification is objected to by the Examin | | | |
| 10)⊠ The drawing(s) filed on 21 June 2004 is/are: a | | | |
| Applicant may not request that any objection to the | | | YED 4 404(d) |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E | | | |
| | · | | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents. 3. Copies of the certified copies of the priority documents. * See the attached detailed Office action for a list. | ats have been received. Its have been received brity documents have beau (PCT Rule 17.2(a)). | in Application No een received in this Nationa | I Stage |
| Attachment(s) | | | |
| 1) Notice of References Cited (PTO-892) | | ew Summary (PTO-413) No(s)/Mail Date | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date | T | of Informal Patent Application (PT | ⁻ O-152) |

DETAILED ACTION

The allowability of claims 6, 7, 9,10, 24 and 25 is withdrawn.

The Applicant has already elected species 1, claims 1-10 and 21 for prosecution.

The following restriction applied to the claims of this elected species.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-5 and 21, drawn to an image sensor, classified in class 250, subclass 208.1.
- II. Claims 6-10, drawn to a method of fabricating an image sensor, classified in class 29, subclass 840.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the apparatus could be manufactured by first bonding the second bump and then bonding the first bump.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

A telephone call was made to Joseph Lerch on 08/12/04 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the Applicant has incorrectly submitted proposed drawing corrections. Please refer below for the appropriate procedure to make drawing corrections. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. Brooke whose telephone number is (571) 272-2142. The examiner can normally be reached on M-F from 5:30 AM-2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael S. Brooke Primary Examiner Art Unit 2853

MSB 08/12/04